

**IAP20 Rec'd PGT/PTO 20 JAN 2006**

PTO/SB/08A (07-05)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
is a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/565585
Filing Date	
First Named Inventor	Emmanuel Uzoma Okoroafor
Art Unit	
Examiner Name	
Attorney Docket Number	M03B120

Sheet	1	of	5
-------	---	----	---

## U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Foreign Patent Document  Country Code*Number**Kind Code* (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
/EW/	2	DD 151 331 A	10-14-1981	Kurze et al.	
↓	3	DE 101 63 864 A1	07-10-2003	Leybold Vakuum GmbH	
	4	DE 101 34 559 A1	02-06-2003	Fraunhofer-Gesellschaft..	
	5	DE 42 39 391 A1	06-09-1993	Electro Chemical Eng ...	
	6	GB 2 237 030 A	04-24-1991	Dipsol Chemicals Co Ltd	
	7	WO 96/24717 A1	08-15-1996	RM Metal Consulting KY	

Examiner  
Signature

/Edna Wong/

Date Considered

10/03/2009

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.114. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (07-05)

Approved for use through 07/31/2006. OMB 0651-003  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
is a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

**Complete if Known**


Application Number	10/565585
Filing Date	10/565585
First Named Inventor	Emmanuel Uzoma Okoroafor
Art Unit	
Examiner Name	
Attorney Docket Number	M03B120

Sheet	2	of	5
-------	---	----	---

## U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	1*
		Country Code*Number**Kind Code*(if known)	MM-DD-YYYY			
	8	EP 0 406 579 B1	09-08-1993	NKK Corporation		
	9	GB 1 247 881	09-29-1971	United States Steel Corp.		
	10	JP 10-219426 A	08-18-1998	Tocalo Co Ltd		
	11	JP 10-46316 A	02-17-1998	Kubota KK		
	12	JP 11-229162 A	08-24-1999	Kubota KK		
	13	JP 9-25558 A	01-28-1997	Kubota KK		

Examiner  
Signature

/Edna Wong/

Date Considered

10/03/2009

<sup>1</sup> EXAMINER. Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.114. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/565585
Filing Date	
First Named Inventor	Emmanuel Uzoma Okoroafor
Art Unit	
Examiner Name	
Attorney Docket Number	M03B120

Sheet 3

of 5


Attorney Docket Number

M03B120

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	1 <sup>st</sup>
		Country Code* Number **Kind Code* (if known)	MM-DD-YYYY			
<div style="text-align: center;">  </div>	14	JP 56-169788 A	12-26-1981	Nippon Steel Corp		
	15	RU 2 199 613 C2	02-27-2003	Agababyan, R.E.		
	16	RU 2 026 890 C	01-20-1995	Malyshhev, V.N.		
	17	EP 0 406 579 A3	01-09-1991	NKK Corp		
	18	JP 7-305162	11-21-1995	Toshiba Corp		

Examiner  
Signature

/Edna Wong/

Date \_\_\_\_\_

Considered

10/03/2009

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (07-05)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Complete if Known

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 4

of

5

Application Number	10/565585
Filing Date	
First Named Inventor	Emmanuel Uzoma Okoroafor
Art Unit	
Examiner Name	
Attorney Docket Number	M03B120

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/EW/	19	PCT International Search Report of International Application No. PCT/GB2004/003010; Date of mailing of International Search Report: April 6, 2005	
	20	United Kingdom Search Report for Application No. GB0406417.6; Date of search: April 14, 2004	
	21	R.E. AGABABYAN, G.G. NECHAEV; abstract of RU 2199613 C, "Method for Covering Components of Stop Valves with Protective Coatings (Alternatives)," February 27, 2003; WPI abstract accession no. 03-339819/32	
	22	A.K. BOGDANOV, V.N. MALYSHEV, N.V. MALYSHEVA; abstract of RU 2026890 C, "Method of Wear-Resistant Coating Forming," January 20, 1995; WPI abstract accession no. 95-253372/33	
	23	LEYBOLD VAKUUM GMBH, abstract of DE 10163864 A, "Process for Coating Objects Made from Valve Metals or Their Alloys with a Thin Barrier Layer Made from a Metal and an Oxide Ceramic Layer Comprises Inserting the Fluoropolymers into the Capillary System of the Oxide Ceramic Layer and Drying," July 10, 2003; WPI abstract accession no. 03-607968/57	
	24	ELECTRO CHEM ENG GMBH, abstract of DE 4239391 A, "Aluminum Magnesium, Titanium Wear Resistant Rotor - Comprises Oxide Ceramic Layer with Fluoro Polymer, e.g. Poly-Tetra-Fluoroethylene, for Resistance to Corrosion for Turbo Mol. Pump," June 9, 1993; WPI abstract accession no. 93-189612/11	
↓	25	TOCALO CO LTD, EBARA CORP; abstract of JP 10219426 A, "Member for Semiconductor Manufacturing Process," August 18, 1998; WPI abstract accession no. 90-502093/43	

Examiner Signature	/Edna Wong/	Date Considered	10/03/2009
--------------------	-------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (07-05)

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Complete if Known

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 5

of

5

Application Number	10/565585
Filing Date	
First Named Inventor	Emmanuel Uzoma Okoroafor
Art Unit	
Examiner Name	
Attorney Docket Number	M03B120

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/EW/ ↓	26	KUBOTA KK, abstract of JP 10-046316 A, "Production of External Corrosion Resistant Tube," February 17, 1998; WPI abstract accession no. 98-189719/17	
	27	KUBOTA KK, abstract of JP 11-229162 A, "Surface Treatment of Metallic Thermally Spray Coating for Corrosion Protection," August 24, 1999;	
		WPI abstract accession no. 99-523164/44	
	28	KUBOTA KK, abstract of JP 9-25558 A, "Production of Pipe Excellent in Corrosion Resistance in Outside Face," January 28, 1997; WPI abstract accession no. 97-150009/14	
	29	NIPPON STEEL CORP, abstract of JP 56-169788 A, "Steel Sheet Useful as Welded Can," December 26, 1981; WPI abstract accession no. 81-75760D/25	
	30	United Kingdom Search Report for Application No: GB 0317126.1; Date of search: November 14, 2003	
	31	R.Ye. AGABABYAN, G.G. NECHAYEV; translation of RU 2199613 C2, entitled "Method for Forming Protective Coatings on Valve Components (Alternative Methods)"; February 27, 2003	
	32	KURZE et al., translation of DD 151331A, entitled "Process for Producing Modified Oxide Layers," October 14, 1981	
	33	KAZUHIDE MATSUMOTO, KAZUHIRO YASUDA, TAKANARI OKAMURA, MICHIO WATANABE, BENIKO YOSHIKURA, KEIZO HONDA; Patent Abstracts of Japan; Publication No. 07-305162,	
		entitled "Production of Ceramic Coating," Date of publication: November 21, 1995	

Examiner Signature	/Edna Wong/	Date Considered	10/03/2009
--------------------	-------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 509. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.